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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/894,351	10/27/97	REDECKER	K 306.35565X00

PM92/0721

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EXAMINER

MILLER, E

ART UNIT	PAPER NUMBER
3641	12

DATE MAILED: 07/21/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

# Office Action Summary

Application No.  
**08/894,351**

Applicant(s)  
**Redecker et al.**

Examiner  
**Edward Miller**

Group Art Unit  
**3641**



☒ Responsive to communication(s) filed on May 11, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-25 is/are pending in the application.

Of the above, claim(s) 5, 6, 8, 12, 13, 15, and 17-25 is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-4, 7, 9-11, 14, and 16 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☒ Claims 1-25 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☒ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1. Applicant's election with traverse of Group I in Paper No. 8 is acknowledged. The traversal is on the ground(s) that PCT practice allows plural classes of invention. This is not found persuasive for the reasons set forth in Paper No. 9.

The requirement is still deemed proper and is therefore made FINAL.

2. Applicant's election of the recited species in Paper No. 11 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). This is as to the requirement above, as matters stand at this time. Action as to the elected plurality of species, as set forth by applicants, as best understood, follows. It must be pointed out that the claims are so indefinite that the content thereof is not well understood. Thus, upon amendment, it is possible that different claims will be understood as belonging to the elected species. Currently, in accordance with the elected examples 1, 2, and 4, e.g., it appears that claims 19-24 stand withdrawn as being to nonelected inventions, and claims 5-6, 8, 12-13, 15, 17-18 and 25 stand withdrawn as being to nonelected species.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-4, 7, 9-11, 14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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These claims are so indefinite that it cannot be determined what the intended invention is. For example, only, the claims are of the characterized in that form. Since this is a 371 application, this is permissible; however, it is not clear whether this is intended to be the Jepson format, or a recitation in the international manner of the “comprising” claim scope, or something else. Applicants are required to clarify this matter, at least in their remarks. If the claims are intended to be of the Jepson format, proper Jepson useage is required, including a complete, general preamble, followed by the improvement, which may in this instance embody the “characterized” international language or format. Throughout the claims, such as at claim 3, line 3, “preferably” is used, whereby it is not possible to determine if the preferable requirement is intended, or if the general case, without the “preferably” limitation is intended. This “preferably” problem is aggravated, with other factors recited herein, as to infect the claims as a whole with indefiniteness. Likewise, in claim 1, just prior to the “d)” part, “optionally also” is found. While in some instances, optionally is permissible, it may aggravate other problems. Here, due to the “characterized claim format, it is not clear whether the claims are intended to be of the “comprising” scope. If they are, then the “optionally” recitation may be surplus, as any ingredients may be added to “comprising” scope claims, and in any amounts. Thus, this “optionally” language tends to aggravate indefiniteness as to what the intended scope of the claims is. In the instant case, many recitations of “optionally” are found, whereby the situation is aggravated. Examples include claim 2, about line 14 and the penultimate line thereof. In claim 1, the “a)” part, if this is intended to be a Markush group, then the recitation is flawed, improperly using “compound [selected from]

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from the group:" without --consisting of—and with “or” instead of –and--. Further, this grouping is indefinite in the term “derivatives thereof or their salts.” This is indefinite in that “derivatives” is nebulous in form, as practically anything may be derived from the starting recited ingredients, particularly since some of the first considered derivatives would be simple salts, which are separately recited. It is unclear whether this is a duplication of what is included in derivatives, or some improper implied limitation of what “derivatives” means. Further, the term derivatives results in that the members of the group overlap, since different members of the group may themselves be derived from others of the group. Also in the “a)” recitation, “(fuel)” is a parenthetical recitation, which is indefinite; “fuel” without parentheses should be a part of the amended claim language. The members of the “b)” part substances and the “c)” parts substances overlap, and possibly also with the “d)” substances, as different oxidizers/ingredients have an effect on the combustion rate, byproducts, etc., of oxidizer/fuel combinations which otherwise differ. In claim 14, e.g., an heterogeneous combustion moderator, e.g., of a noble metal, e.g., as taught in the specification, would not be a part of the gas generating composition. Therefore, the claimed “composition” is confused as possibly a hybrid claim form, including two separate categories of invention, e.g., device and composition, which is improper under 35 USC 101 and 112, e.g. The claim 14, line 13 recitation of “such as, for example” is indefinite as it opens the claims to unknowable other possibilities. These are mentioned as exemplary, only, and are not exhaustive. The claims need to be completely rewritten in proper US form whereby the content, e.g., the meets and bounds of the invention will be apparent. Further, to the extent that applicants may deem that

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other claims, currently deemed non-elected, should be considered as reading on the elected species, or that generic claims may be presented which would be free of rejection, consideration to rewriting all the composition claims, elected or not, should be given.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 7, 9-11, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blau et al., in view of Lund et al. '059, Wardle et al., Highsmith et al., and Yoshida et al. '446.

Blau et al. teach the basic invention which includes tetrazole fuel, e.g., with various oxidizers, including metal oxides, metal peroxides, perchlorates, nitrates, and mixtures thereof. Note the Abstract and col. 2, lines 30-32, e.g. Further detail is found at col. 5, lines 25-55 for fuels, and oxidizers at col. 6, lines 1-21, and additives at col. 6, lines 31-57. Substitution of specific notoriously well known ingredients or specific mixtures thereof would have been obvious to one of ordinary skill in the art. Note Lund et al. '059 (col. 5, lines 1-50, e.g., as well as "Table 3" with a plurality of oxidizers), Wardle et al. (zinc peroxide, col. 3, lines 20 and 22), Highsmith et al. generally and in the examples with a plurality of oxidizers, e.g. Yoshida et al. '446, is further relevant, showing three oxidizers in "Table 1", "Example 15", e.g., which also shows ADCA, ostensibly a derivative of at least one of the recited fuels

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in claim 1, and thus also being, in view of indefiniteness, possibly the epitome of obviousness, anticipation. It is well settled that optimizing a result effective variable is well within the expected ability of a person or ordinary skill in the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

7. Should applicants' German priority date be needed, a certified translation thereof will be required. Such does not appear to be in the file at present. Further, references from the international stage not cited do not appear to be in the English language, either.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning either this or an earlier communication from the Examiner should be directed to Examiner Edward A. Miller at (703) 306-4163.

Examiner Miller may normally be reached daily, except alternate Fridays, from 8:30 AM to 6 PM.

If attempts to reach Examiner Miller by telephone are unsuccessful, his supervisor Mr. Jordan can be reached at (703) 306-4159. The Group fax number is (703) 305-7687.

If there is no answer, or for any inquiry of a general nature or relating to the application status, please call the Group receptionist at (703) 308-1113.

Miller/em  
July 18, 1999



EDWARD A. MILLER  
PRIMARY EXAMINER